

1/1 - (C) WPI / DERWENT

AN - 2002-010886 [01]

**AP - WO2001US11988 20010412; AU20010066557 20010412; IBased on WO0177137 I
; EP20010944114 20010412**

**PR - US20000256931P 20001221; US20000229358P 20000412; US20000199384P
20000425**

**TI - New fusion protein for treating disease e.g. diabetes comprises an
albumin fused to a therapeutic protein**

**IW - NEW FUSE PROTEIN TREAT DISEASE DIABETES COMPRISE ALBUMIN FUSE
THERAPEUTIC PROTEIN**

PA - (HUMA-N) HUMAN GENOME SCI INC

PN - WO0177137A1 20011018 DW200201 C07H21/04 Eng 000pp

- AU200166557 A 20011023 DW200213 C07H21/04 000pp

- EP1276756 A1 20030122 DW200315 C07H21/04 Eng 000pp

IC - C07H21/04

**AB - WO200177137 NOVELTY - An albumin fusion protein (I) comprising a
therapeutic protein X and albumin comprising a fully defined 585 amino
acid sequence (S1) given in the specification, is new.**

**- DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the
following:**

**- (1) an albumin fusion protein (II) comprising a therapeutic protein X
and a fragment or variant of S1 having albumin activity;**

**- (2) an albumin fusion protein (III) comprising a fragment or variant
of therapeutic protein X and an albumin having S1;**

**- (3) an albumin fusion protein (IV) comprising a protein X, fragment or
variant inserted into an albumin comprising S1;**

- (4) a kit comprising the protein;

**- (5) a nucleic acid molecule comprising a polynucleotide sequence
encoding (I)-(IV);**

- (6) a vector comprising the nucleic acid molecule; and

- (7) a host cell comprising the nucleic acid molecule.

**- ACTIVITY - Cytostatic; antiinfertility; antiinflammatory; antiulcer;
immunomodulator; anti-HIV; antidiabetic; hemostatic; nootropic;
neuroprotective; antiparkinsonian; antimicrobial; neuroleptic;
osteopathic; antiarthritic.**

- MECHANISM OF ACTION - gene-therapy; vaccine.

**- USE - The protein is useful for treating a disease or disorder that
may modulated by therapeutic protein X (claimed). The albumin extends
the shelf-life of protein X, and may increase its biological in
vitro/in vivo activity (claimed). The protein is useful for treating
and diagnosing e.g. cancer, reproductive disorders, digestive
disorders (e.g. Crohn's disease, ulcerative colitis), immune disorders
(e.g. AIDS), endocrine disorders (e.g. diabetes), hematopoietic
disorders, neural disorders (e.g. Alzheimer's, Parkinson's,
Creutzfeldt-Jacob disease, encephalomyelitis, meningitis,
schizophrenia) and a connective disorder (e.g. osteoporosis,
arthritis).**

- (Dwg.0/15)

10/539565

JC17 Rec'd PCT/PTO 17 JUN 2005

L1 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2004 ACS, ON STN
 RN ***369415-18-9*** REGISTRY
 CN 296: PN: WO0177137 SEQID: 1962 unclaimed protein (9CI) (CA INDEX NAME)
 FS PROTEIN SEQUENCE
 SQL 305

PATENT ANNOTATIONS (PNTE):

Sequence	Patent
Source	Reference

Not Given	WO2001077137
	unclaimed
	SEQID 1962

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SEQ      1 MPANFTEGSF DSSGTGQTL D SSPVACTETV TFTEVVEGKE WGSFYYSFKT
        51 EQLITLWVLF VFTIVGNSVV LFSTWRRKKK SRMTFFVTQL AITEKQARVL
       101 IVIAWSLSFL FSIPTLIIFG KRTLSNGEVQ CWALWPDDSY WTPYMTIVAF
       151 LVYFIPLTII SIMYGIVIRT IWIKSKTYET VISNCSDGKL CSSYNRGLIS
       201 KAKIKAIKYS IIIILAFICC WSPYFLFDIL DNFNLLPDTQ ERFYASVIIQ
       251 NLPALNSAIN PLIYCVFSSS ISFP CREQRS QDSRMTFRER TERHEMQILS
       301 KPEFI
  
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(369415-18-9) 296: PN: WO0177137 SEQID: 1962 unclaimed protein
Length = 305 Score = 617 Expect = e-176

(402537-80-8) Secretory protein (human clone HTPIY88 305-amino acid precursor)

Score = 617 Expect = e-176
Identities = 305/305 (100%) Positives = 305/305 (100%)

55 Query: 1 MPANFTEGSFDSSGTGQTL DSSPVACTETVTFTEVVEGKEWGSFYYSFKTEQLIT

55 Subject: 1 MPANFTEGSFDSSGTGQTL DSSPVACTETVTFTEVVEGKEWGSFYYSFKTEQLIT

110 Query: 56 LWVLFVFTIVGNSVVL FSTWRRKKKSRMTFFVTQLAITEKQARVLIVIAWSLSFL

110 Subject: 56 LWVLFVFTIVGNSVVL FSTWRRKKKSRMTFFVTQLAITEKQARVLIVIAWSLSFL

165 Query: 111 FSIPTLIIFGKRTL SNGEVQCWALWPDDSYWTPYMTIVAFLVYFIPLTIISIMYG

165 Subject: 111 FSIPTLIIFGKRTL SNGEVQCWALWPDDSYWTPYMTIVAFLVYFIPLTIISIMYG

220 Query: 166 IVIRTIWIKSKTYETVISNCSDGKLCSSYNRGLISKAKIKAIKYSIIIIILAFICC

220 Subject: 166 IVIRTIWIKSKTYETVISNCSDGKLCSSYNRGLISKAKIKAIKYSIIIIILAFICC

275 Query: 221 WSPYFLFDILDN FNLLPDTQERFYASVIIQNL PALNSAINPLIYCVFSSSISFPC

275 Subject: 221 WSPYFLFDILDN FNLLPDTQERFYASVIIQNL PALNSAINPLIYCVFSSSISFPC

Query: 276 REQRSQDSRMTFRERTERHEMQILSKPEFI 305
REQRSQDSRMTFRERTERHEMQILSKPEFI

Subject: 276 REQRSQDSRMTFRERTERHEMQILSKPEFI 305